

The Morning Email: TERM TEDS & Dirty TEDS

Table of Contents

- Pg 1** Quotes

- Pg 2** Dirty TED: ZT vs Eurodollar Contracts

- Pg 3** Dirty TED: ZF vs Eurodollar Contracts

- Pg 4** Dirty TED: ZN vs Eurodollar Contracts

- Pg 5** TERM TED: 2y vs Eurodollar Contracts

- Pg 6** TERM TED: 5y vs Eurodollar Contracts

- Pg 7** TERM TED: 10y vs Eurodollar Contracts

- Pg 8** Dirty TED Curve

- Pg 9** TED Curve

- Pg 10** 2y Basis TED Curve

- Pg 11** 5y Basis TED Curve

- Pg 12** 10y Basis TED Curve

- Pg 13** Packs

- Pg 14** 2y, 5y, 10y Basis Curves vs ED **New**

Want something added? Let me know: jgoulding@ghco.com

Disclaimer: All information within this newsletter is meant for internal use at GH Trader's LLC, only. All information has been recorded to the best of my ability. This material is based upon information that I consider reliable, but I do not represent that it is accurate or complete.

Treasury Futures and Cash				
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	107.0375	107.012	1.774	1.84
ZF	113.5219	113.167	2.575	3.98
ZN	117.4375	117.140	4.186	5.94
2y	99.828	99.2650	1.841	1.91
5y	99.194	99.0620	2.673	4.62
10y	99.328	99.1050	3.579	8.20

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM08	97.430	2.570	61	0.166	JUN	
EDAU08	97.560	2.440	152	0.416	SEP	White
EDAZ08	97.470	2.530	243	0.665	DEC	Pack
EDAH09	97.450	2.550	334	0.914	MAR	
EDAM09	97.295	2.705	425	1.164	JUN	
EDAU09	97.110	2.890	516	1.413	SEP	Red Pack
EDAZ09	96.870	3.130	607	1.662	DEC	
EDAH10	96.700	3.300	698	1.912	MAR	
EDAM10	96.490	3.510	789	2.161	JUN	
EDAU10	96.290	3.710	880	2.410	SEP	Green
EDAZ10	96.095	3.905	971	2.660	DEC	Pack
EDAH11	95.970	4.030	1062	2.909	MAR	
EDAM11	95.820	4.180	1153	3.158	JUN	
EDAU11	95.700	4.300	1251	3.427	SEP	Blue Pack
EDAZ11	95.565	4.435	1342	3.676	DEC	
EDAH12	95.485	4.515	1433	3.925	MAR	
EDAM12	95.420	4.580	1524	4.175	JUN	
EDAU12	95.310	4.690	1615	4.424	SEP	Gold Pack
EDAZ12	95.210	4.790	1706	4.673	DEC	
EDAH13	95.150	4.850	1797	4.923	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	2.574	-1.375	9747.750	
Red Pack	3.071	-2.125	9699.375	Pack
Green Pack	3.878	-2.750	9621.125	Prices
Blue Pack		0.000	9567.250	
Gold Pack		0.000	9528.875	

Red pack is a 2yr proxy
 Gold pack is a 10yr proxy
 Red /Gold is a 2/10 proxy
 Blue pack is a 5yr proxy
 Blue/Gold is a 5/10 proxy

Notes

* Futures use CTD for Last Yield

IF : '#VALUE!', then, no quote being provided by exchange.

How many ways can you hedge the TED? Let me count...there's lots and lots, like:

- 1 Regression
 - 2 Engineered
 - 3 Strip with and without Stubs
 - 4 Convexity Bias
 - 5 Weighted
 - 6 Unweighted
- and more...

Most of us are interested in the *unweighted hedge* which is simply a curve trade hedge. There are so many ways to hedge the TED trade that I can't possibly list them all.

If you email me and ask for a specific hedge, I'll get it to you.

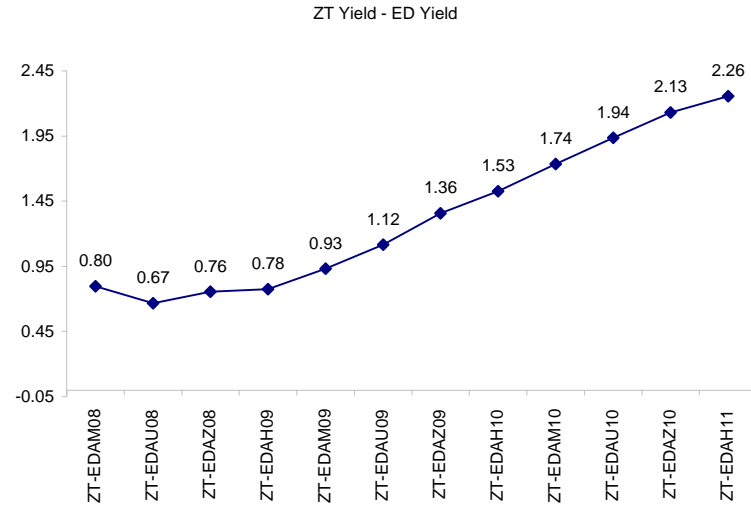
jgoulding@ghco.com

Correlations (Important)

Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days.

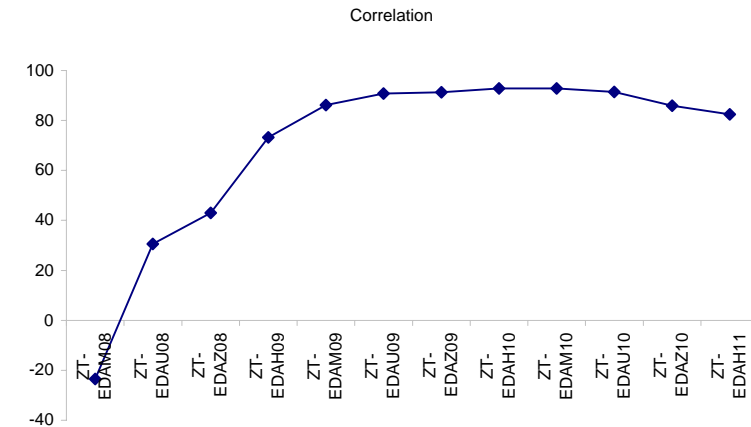
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	9.607	0.80	ZT-EDAM08	-23.478
EDAU08	9.477	0.67	ZT-EDAU08	30.592
EDAZ08	9.568	0.76	ZT-EDAZ08	42.942
EDAH09	9.587	0.78	ZT-EDAH09	73.249
EDAM09	9.742	0.93	ZT-EDAM09	86.206
EDAU09	9.927	1.12	ZT-EDAU09	90.752
EDAZ09	10.168	1.36	ZT-EDAZ09	91.266
EDAH10	10.338	1.53	ZT-EDAH10	92.786
EDAM10	10.548	1.74	ZT-EDAM10	92.841
EDAU10	10.748	1.94	ZT-EDAU10	91.376
EDAZ10	10.943	2.13	ZT-EDAZ10	85.904
EDAH11	11.068	2.26	ZT-EDAH11	82.394

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZT Duration	Spread Duration	
EDAM08	0.166	1.84	1.67	ZT-EDAM08		
EDAU08	0.416	1.84	1.42	ZT-EDAU08		
EDAZ08	0.665	1.84	1.17	ZT-EDAZ08		
EDAH09	0.914	1.84	0.92	ZT-EDAH09		
EDAM09	1.164	1.84	0.67	ZT-EDAM09		
EDAU09	1.413	1.84	0.42	ZT-EDAU09		
EDAZ09	1.662	1.84	0.17	ZT-EDAZ09		
EDAH10	1.912	1.84	(0.07)	ZT-EDAH10		
EDAM10	2.161	1.84	(0.32)	ZT-EDAM10		
EDAU10	2.410	1.84	(0.57)	ZT-EDAU10		
EDAZ10	2.660	1.84	(0.82)	ZT-EDAZ10		
EDAH11	2.909	1.84	(1.07)	ZT-EDAH11		

The farther away from 0 the spread duration is the riskier the trade.

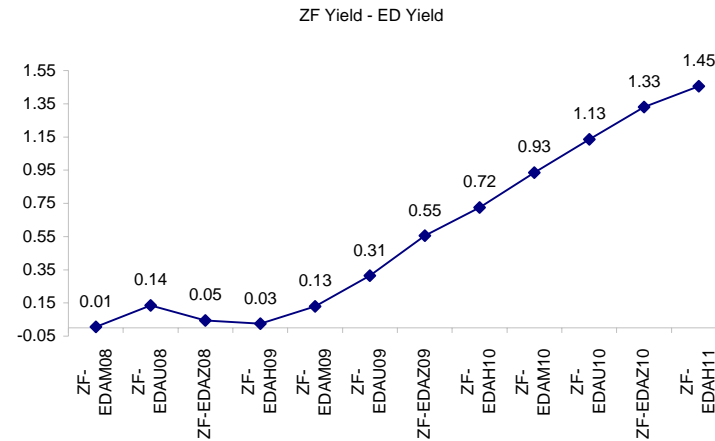


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	16.092	0.01	ZF-EDAM08	-14.795
EDAU08	15.962	0.14	ZF-EDAU08	34.538
EDAZ08	16.052	0.05	ZF-EDAZ08	46.763
EDAH09	16.072	0.03	ZF-EDAH09	73.154
EDAM09	16.227	0.13	ZF-EDAM09	82.232
EDAU09	16.412	0.31	ZF-EDAU09	84.716
EDAZ09	16.652	0.55	ZF-EDAZ09	84.661
EDAH10	16.822	0.72	ZF-EDAH10	87.036
EDAM10	17.032	0.93	ZF-EDAM10	88.142
EDAU10	17.232	1.13	ZF-EDAU10	87.381
EDAZ10	17.427	1.33	ZF-EDAZ10	82.670
EDAH11	17.552	1.45	ZF-EDAH11	81.395

Price = Outright Decimal Price - Euro Contract Price

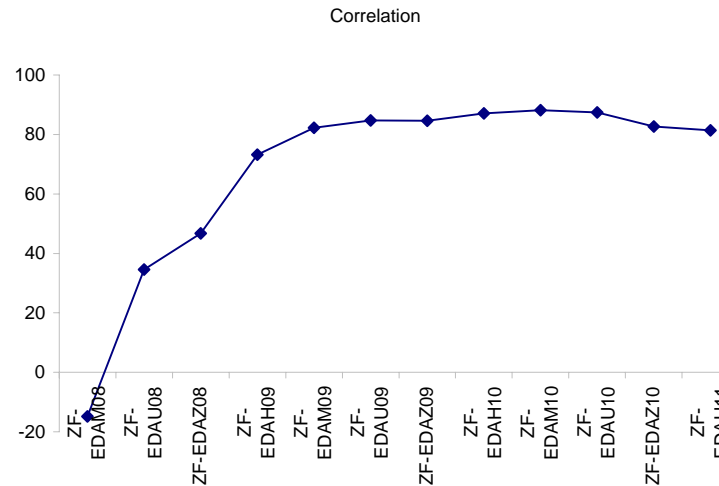
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year	ZF Duration	Spread Duration	
EDAM08	0.166	3.98	3.82	ZF-EDAM08
EDAU08	0.416	3.98	3.57	ZF-EDAU08
EDAZ08	0.665	3.98	3.32	ZF-EDAZ08
EDAH09	0.914	3.98	3.07	ZF-EDAH09
EDAM09	1.164	3.98	2.82	ZF-EDAM09
EDAU09	1.413	3.98	2.57	ZF-EDAU09
EDAZ09	1.662	3.98	2.32	ZF-EDAZ09
EDAH10	1.912	3.98	2.07	ZF-EDAH10
EDAM10	2.161	3.98	1.82	ZF-EDAM10
EDAU10	2.410	3.98	1.57	ZF-EDAU10
EDAZ10	2.660	3.98	1.32	ZF-EDAZ10
EDAH11	2.909	3.98	1.08	ZF-EDAH11

The farther away from 0 the spread duration is the riskier the trade.

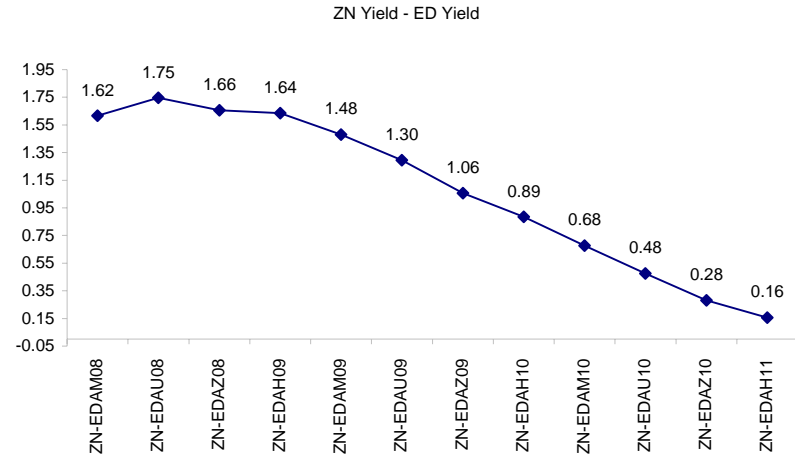


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	20.008	1.62	ZN-EDAM08	55.725
EDAU08	19.878	1.75	ZN-EDAU08	84.607
EDAZ08	19.968	1.66	ZN-EDAZ08	90.344
EDAH09	19.988	1.64	ZN-EDAH09	89.822
EDAM09	20.143	1.48	ZN-EDAM09	79.051
EDAU09	20.328	1.30	ZN-EDAU09	70.214
EDAZ09	20.568	1.06	ZN-EDAZ09	65.800
EDAH10	20.738	0.89	ZN-EDAH10	87.036
EDAM10	20.948	0.68	ZN-EDAM10	88.142
EDAU10	21.148	0.48	ZN-EDAU10	87.381
EDAZ10	21.343	0.28	ZN-EDAZ10	82.670
EDAH11	21.468	0.16	ZN-EDAH11	81.395

Price = Outright Decimal Price - Euro Contract Price

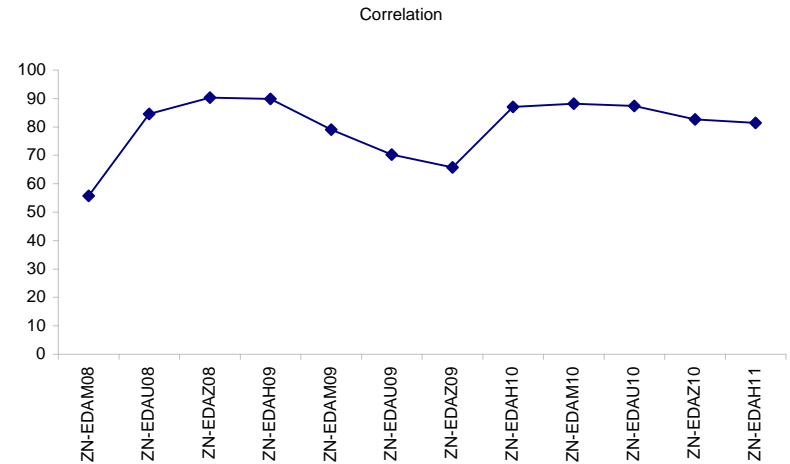
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year	ZN Duration	Spread Duration	
EDAM08	0.166	5.94	5.78	ZN-EDAM08
EDAU08	0.416	5.94	5.53	ZN-EDAU08
EDAZ08	0.665	5.94	5.28	ZN-EDAZ08
EDAH09	0.914	5.94	5.03	ZN-EDAH09
EDAM09	1.164	5.94	4.78	ZN-EDAM09
EDAU09	1.413	5.94	4.53	ZN-EDAU09
EDAZ09	1.662	5.94	4.28	ZN-EDAZ09
EDAH10	1.912	5.94	4.03	ZN-EDAH10
EDAM10	2.161	5.94	3.78	ZN-EDAM10
EDAU10	2.410	5.94	3.53	ZN-EDAU10
EDAZ10	2.660	5.94	3.28	ZN-EDAZ10
EDAH11	2.909	5.94	3.03	ZN-EDAH11

The farther away from 0 the spread duration is the riskier the trade.

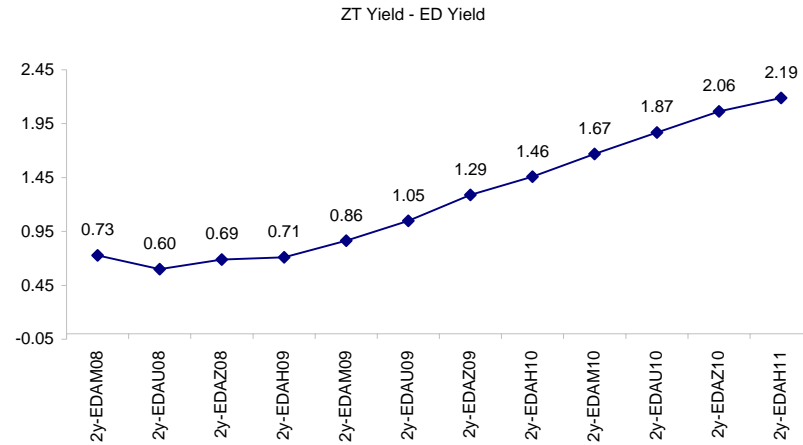


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.398	0.73	2y-EDAM08	0.313
EDAU08	2.268	0.60	2y-EDAU08	-49.289
EDAZ08	2.358	0.69	2y-EDAZ08	-60.876
EDAH09	2.378	0.71	2y-EDAH09	-83.757
EDAM09	2.533	0.86	2y-EDAM09	-89.495
EDAU09	2.718	1.05	2y-EDAU09	-89.810
EDAZ09	2.958	1.29	2y-EDAZ09	-88.371
EDAH10	3.128	1.46	2y-EDAH10	-88.948
EDAM10	3.338	1.67	2y-EDAM10	-89.536
EDAU10	3.538	1.87	2y-EDAU10	-89.316
EDAZ10	3.733	2.06	2y-EDAZ10	-86.042
EDAH11	3.858	2.19	2y-EDAH11	-85.630

Price = Outright Decimal Price - Euro Contract Price

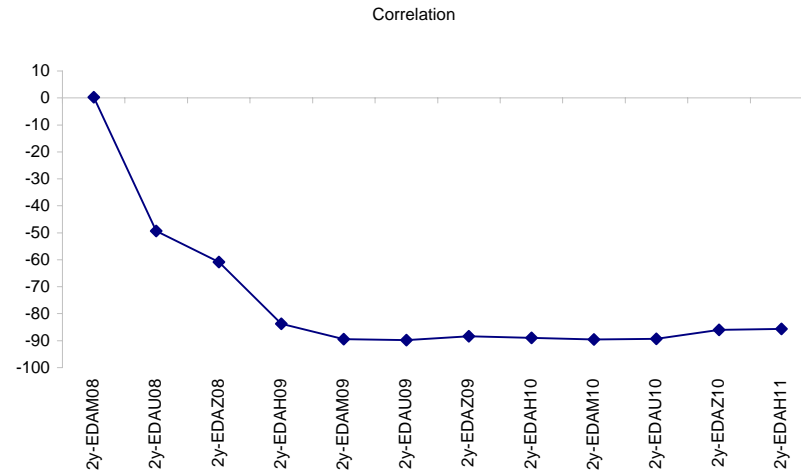
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days.



	ED Duration as Fraction of year			2Y Duration	Spread Duration	
EDAM08	0.166	1.91	1.74	2y-EDAM08		
EDAU08	0.416	1.91	1.49	2y-EDAU08		
EDAZ08	0.665	1.91	1.24	2y-EDAZ08		
EDAH09	0.914	1.91	1.00	2y-EDAH09		
EDAM09	1.164	1.91	0.75	2y-EDAM09		
EDAU09	1.413	1.91	0.50	2y-EDAU09		
EDAZ09	1.662	1.91	0.25	2y-EDAZ09		
EDAH10	1.912	1.91	(0.00)	2y-EDAH10		
EDAM10	2.161	1.91	(0.25)	2y-EDAM10		
EDAU10	2.410	1.91	(0.50)	2y-EDAU10		
EDAZ10	2.660	1.91	(0.75)	2y-EDAZ10		
EDAH11	2.909	1.91	(1.00)	2y-EDAH11		

The farther away from 0 the spread duration is the riskier the trade.

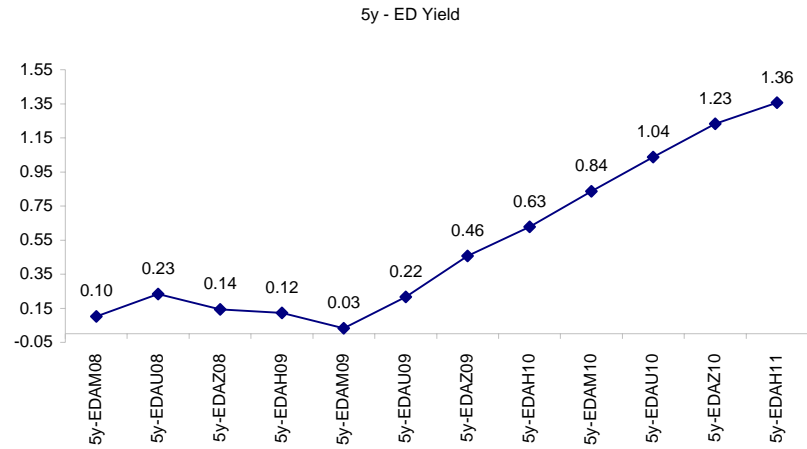


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.764	0.10	5y-EDAM08	-11.478
EDAU08	1.634	0.23	5y-EDAU08	-54.971
EDAZ08	1.724	0.14	5y-EDAZ08	-11.478
EDAH09	1.744	0.12	5y-EDAH09	-83.739
EDAM09	1.899	0.03	5y-EDAM09	-85.667
EDAU09	2.084	0.22	5y-EDAU09	-83.685
EDAZ09	2.324	0.46	5y-EDAZ09	-82.008
EDAH10	2.494	0.63	5y-EDAH10	-83.413
EDAM10	2.704	0.84	5y-EDAM10	-85.141
EDAU10	2.904	1.04	5y-EDAU10	-86.058
EDAZ10	3.099	1.23	5y-EDAZ10	-84.501
EDAH11	3.224	1.36	5y-EDAH11	-86.157

Price = Outright Decimal Price - Euro Contract Price

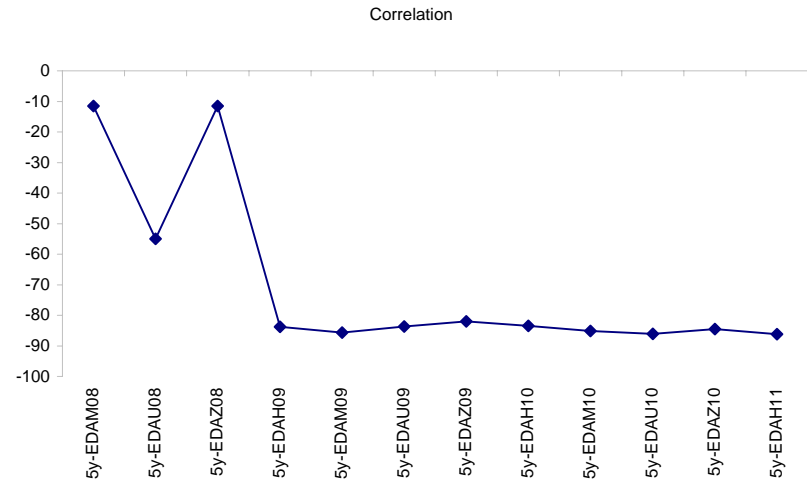
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	5Y Duration	Spread Duration	
EDAM08	0.166	4.62	4.46	5y-EDAM08
EDAU08	0.416	4.62	4.21	5y-EDAU08
EDAZ08	0.665	4.62	3.96	5y-EDAZ08
EDAH09	0.914	4.62	3.71	5y-EDAH09
EDAM09	1.164	4.62	3.46	5y-EDAM09
EDAU09	1.413	4.62	3.21	5y-EDAU09
EDAZ09	1.662	4.62	2.96	5y-EDAZ09
EDAH10	1.912	4.62	2.71	5y-EDAH10
EDAM10	2.161	4.62	2.46	5y-EDAM10
EDAU10	2.410	4.62	2.21	5y-EDAU10
EDAZ10	2.660	4.62	1.96	5y-EDAZ10
EDAH11	2.909	4.62	1.71	5y-EDAH11

The farther away from 0 the spread duration is the riskier the trade.

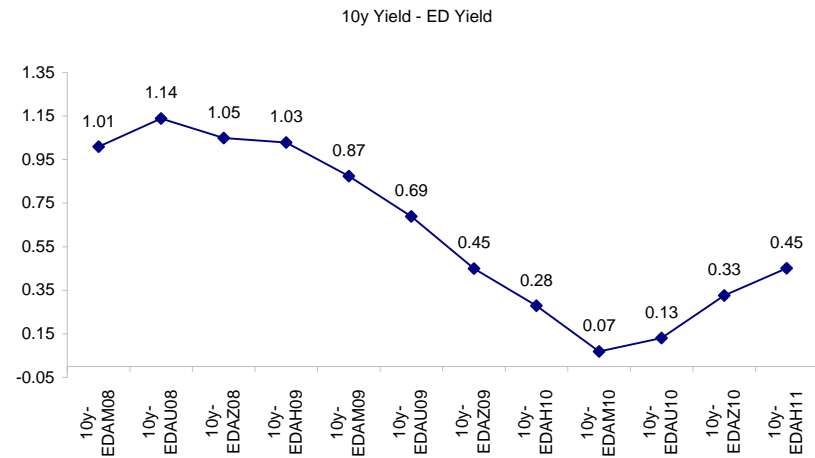


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.764	1.01	10y-EDAM08	-63.581
EDAU08	1.634	1.14	10y-EDAU08	-91.502
EDAZ08	1.724	1.05	10y-EDAZ08	-63.581
EDAH09	1.744	1.03	10y-EDAH09	-94.754
EDAM09	1.899	0.87	10y-EDAM09	-84.615
EDAU09	2.084	0.69	10y-EDAU09	-75.683
EDAZ09	2.324	0.45	10y-EDAZ09	-71.937
EDAH10	2.494	0.28	10y-EDAH10	-69.814
EDAM10	2.704	0.07	10y-EDAM10	-70.882
EDAU10	2.904	0.13	10y-EDAU10	-74.295
EDAZ10	3.099	0.33	10y-EDAZ10	-79.985
EDAH11	3.224	0.45	10y-EDAH11	-85.547

Price = Outright Decimal Price - Euro Contract Price

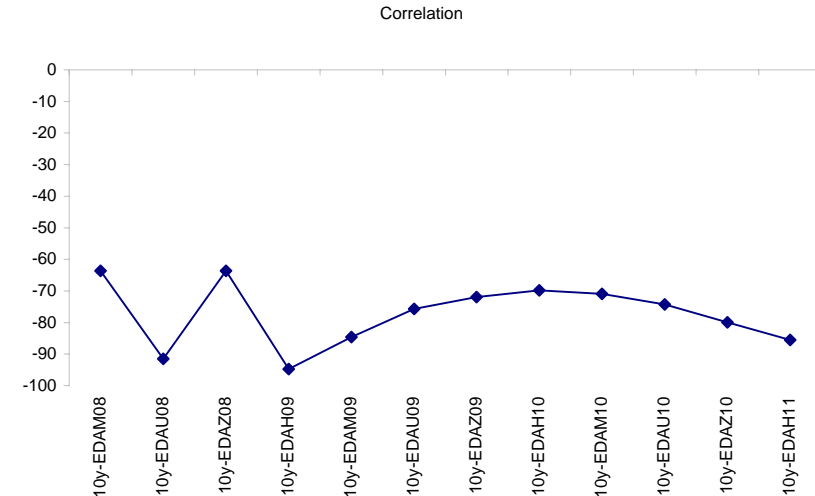
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	10Y Duration	Spread Duration	
EDAM08	0.166	8.20	8.03	10y-EDAM08
EDAU08	0.416	8.20	7.78	10y-EDAU08
EDAZ08	0.665	8.20	7.53	10y-EDAZ08
EDAH09	0.914	8.20	7.29	10y-EDAH09
EDAM09	1.164	8.20	7.04	10y-EDAM09
EDAU09	1.413	8.20	6.79	10y-EDAU09
EDAZ09	1.662	8.20	6.54	10y-EDAZ09
EDAH10	1.912	8.20	6.29	10y-EDAH10
EDAM10	2.161	8.20	6.04	10y-EDAM10
EDAU10	2.410	8.20	5.79	10y-EDAU10
EDAZ10	2.660	8.20	5.54	10y-EDAZ10
EDAH11	2.909	8.20	5.29	10y-EDAH11

The farther away from 0 the spread duration is the riskier the trade.



Dirty TED Curve

Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

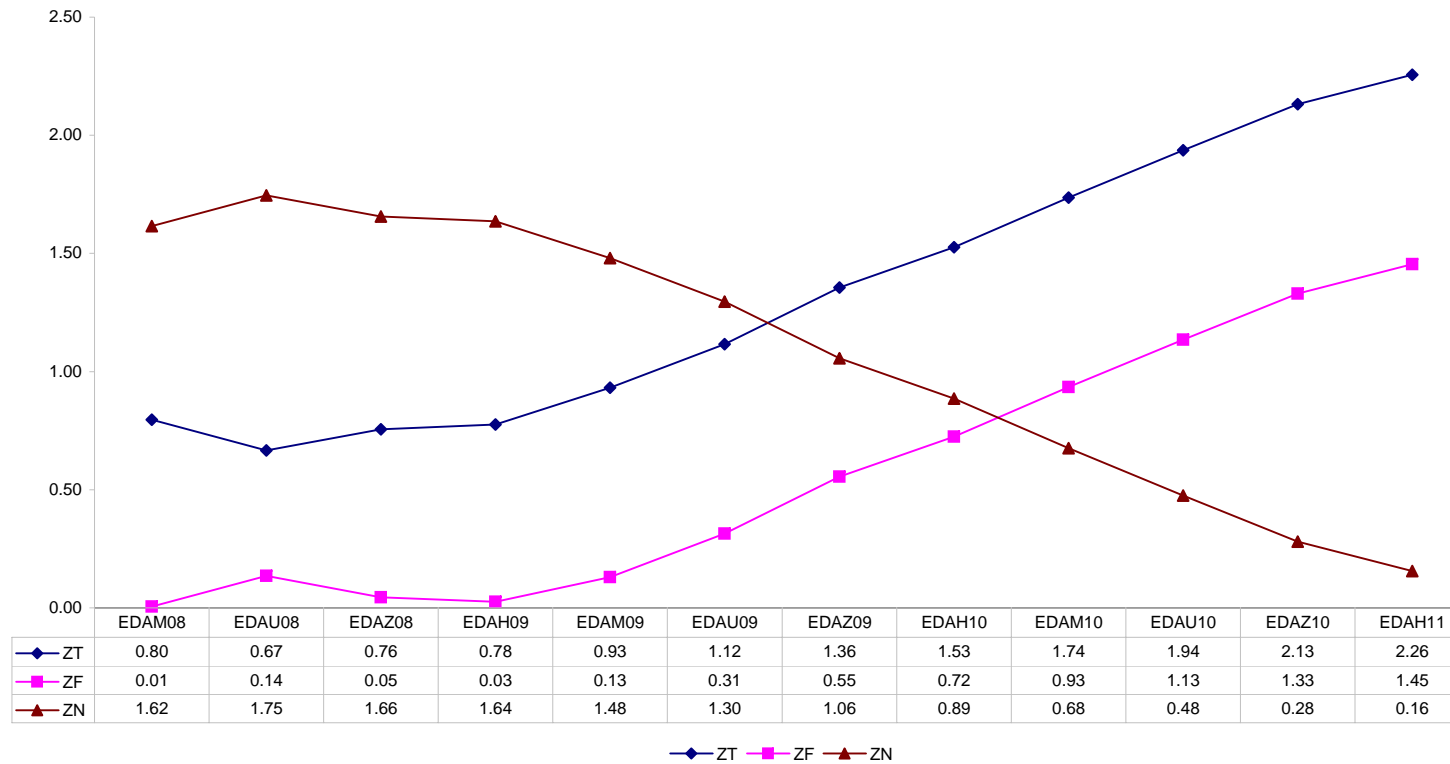
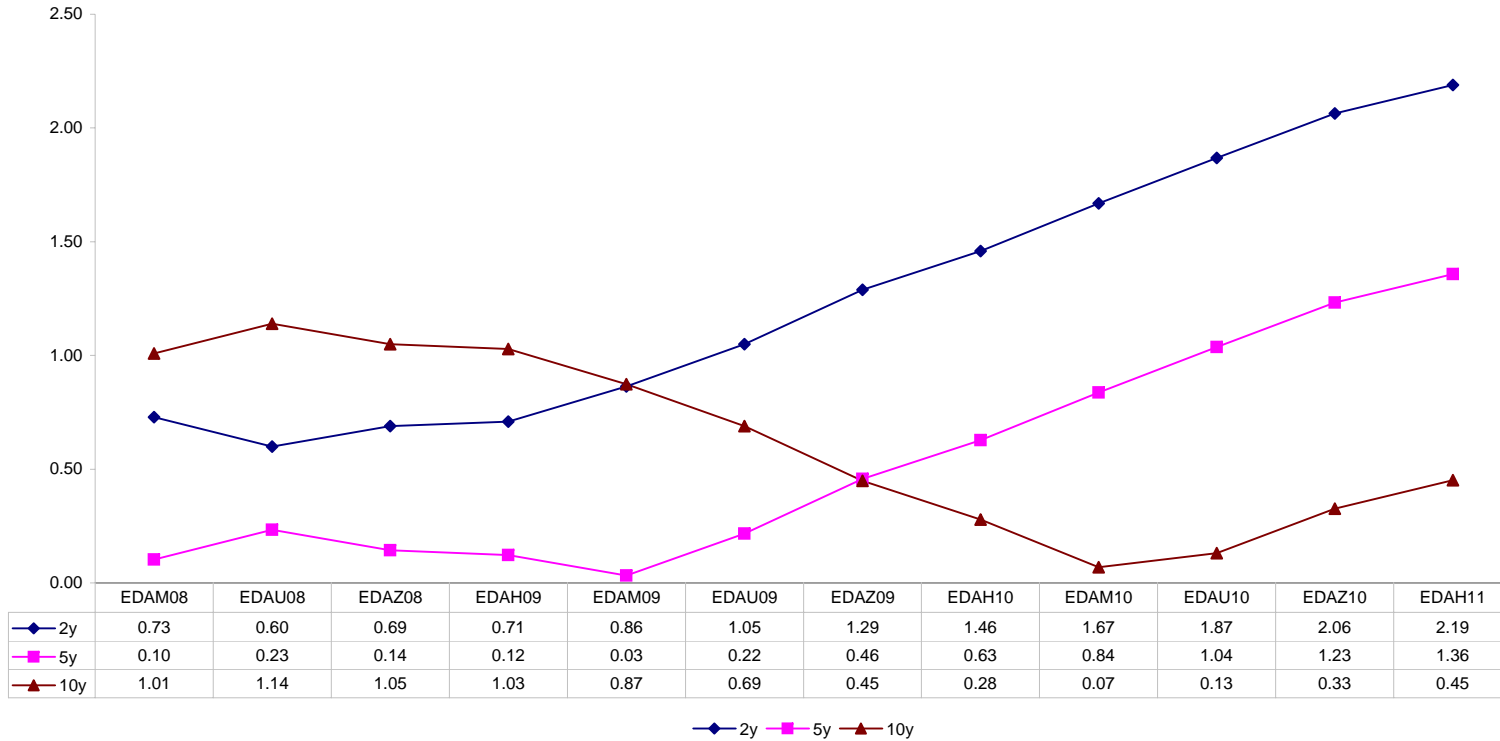
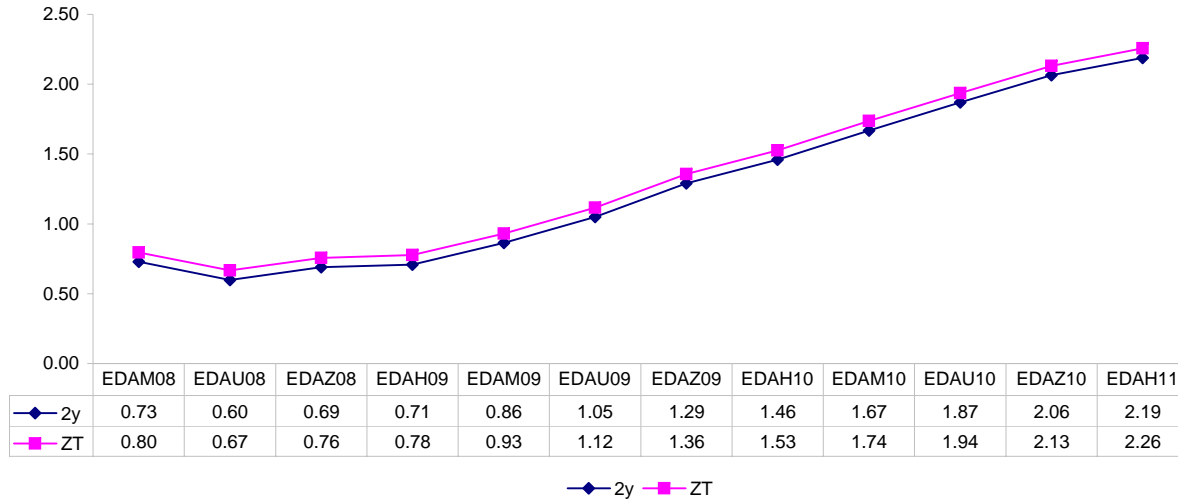


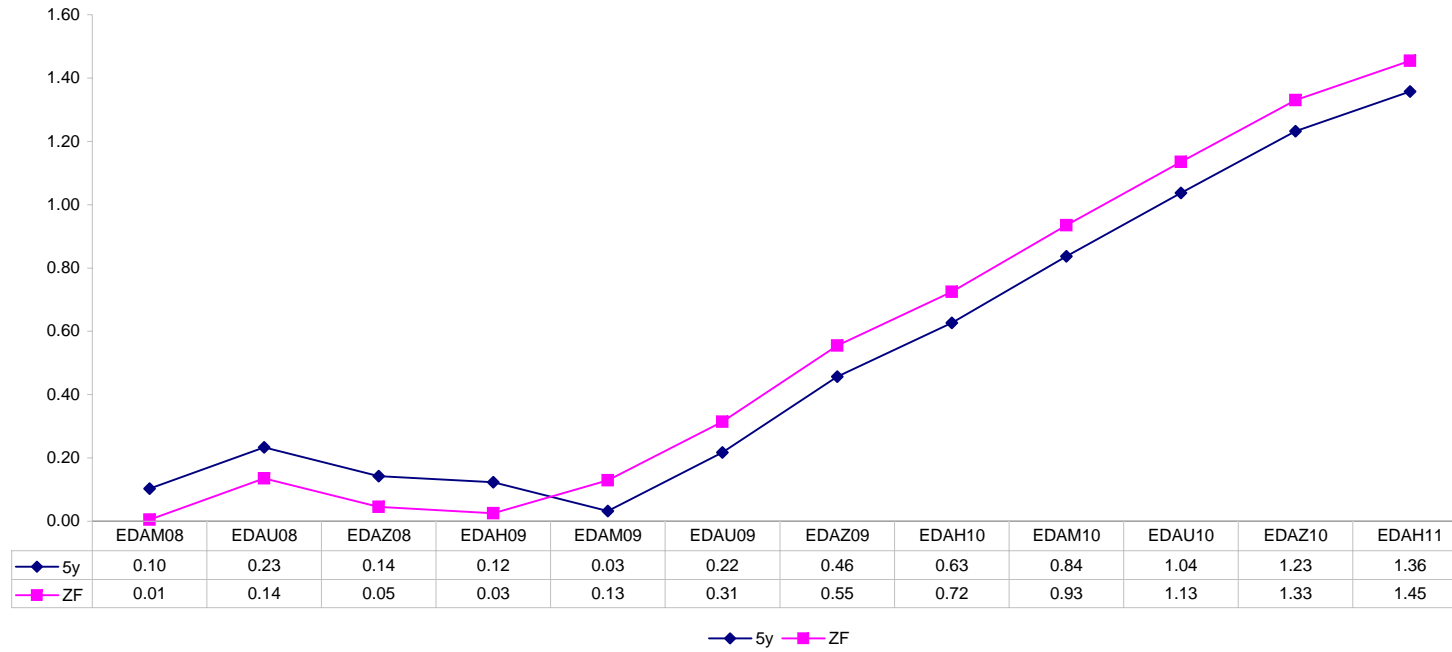
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



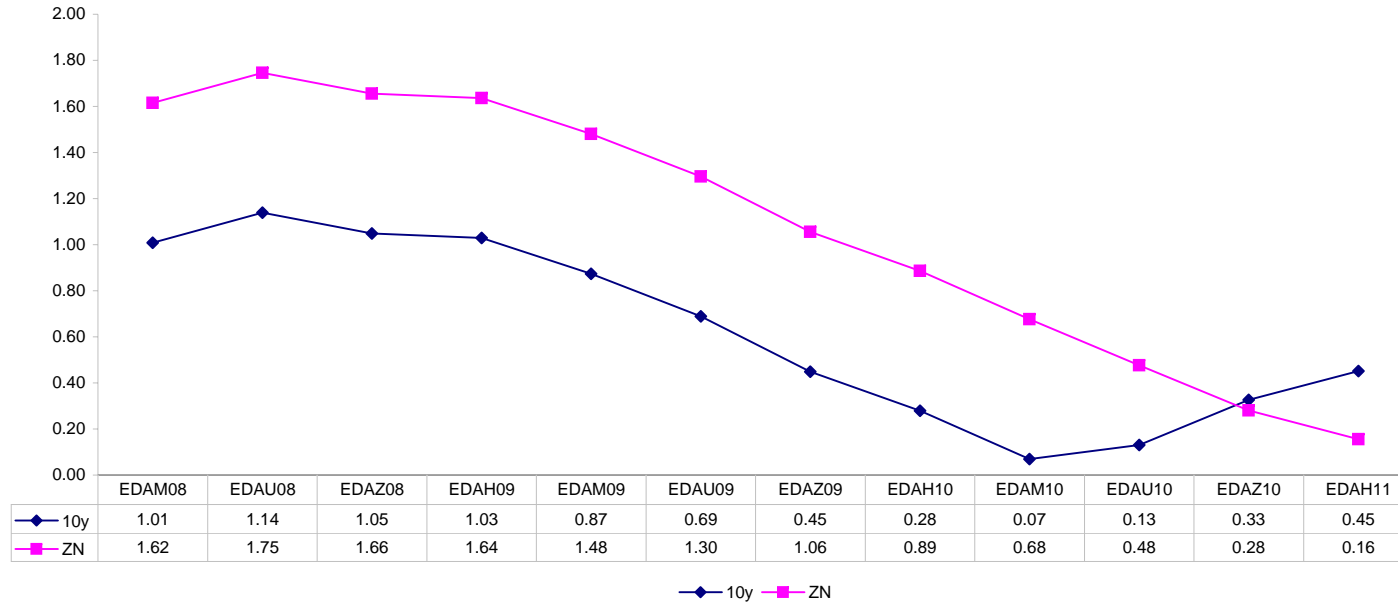
2y Basis TED Curve



5y Basis TED Curve

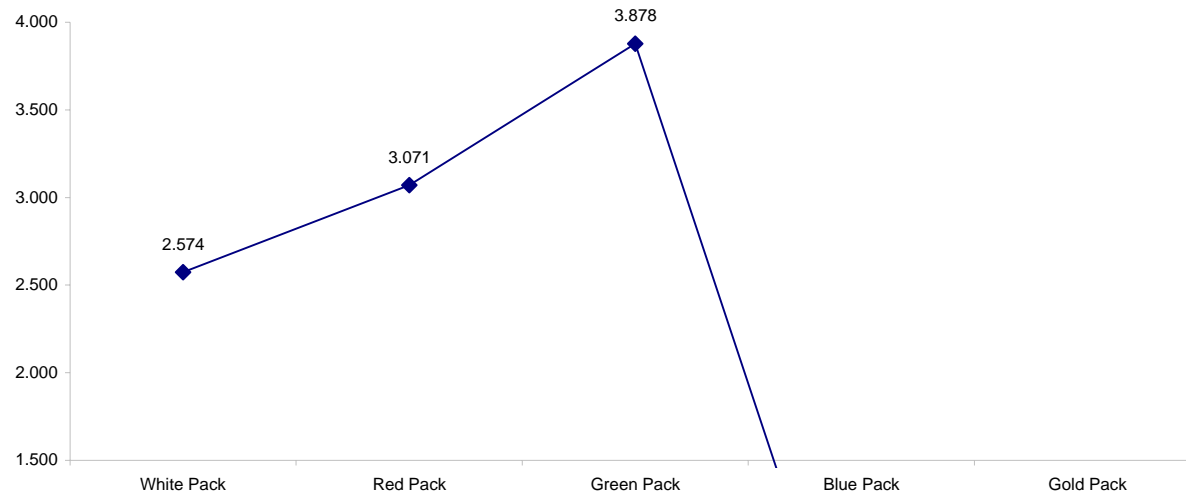


10y Basis TED Curve



Packs

	Last Yield	Net Last Yield	Last Price
White Pack	2.574	-1.375	9747.750
Red Pack	3.071	-2.125	9699.375
Green Pack	3.878	-2.750	9621.125
Blue Pack		0.000	9567.250
Gold Pack		0.000	9528.875



2y, 5y, 10y Basis Curves vs ED

